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ABSTRACT

In order to study the syntactic components which operate in the imitation and recoding of standard English by bilingual and bidialectal children, a sample of 20 multiethnic Spanish speakers and 20 black English speakers was drawn from children in the first, second, and third grades of a metropolitan bilingual program. The ability of these children to reproduce the syntactic features of the Linguistic Structures Repetition test gave an index of errors in the recoding of standard English. Results of the study show that repetition of standard English sentences by black nonstandard English-speaking children and by Spanish-speaking bilingual children is not merely mimicry of the surface structure of the utterance but is often a recoding into a first language or dialect. Teachers and teacher trainees, by noting imitations of standard English structures, can pay special attention to children's recoding processes and can become familiar with the characteristics of the linguistic production of children who do not speak standard English or who have transference problems from a bilingual environment. They can thus adjust their teaching methods to help children overcome language difficulties. (JM)

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THE IMITATION TECHNIQUE: A TOOL FOR ASCERTAINING AN INDEX OF BILINGUALISM AND BIDIALECTALISM IN PRIMARY-GRADE CHILDREN THROUGH ANALYSES OF RECODING ERRORS

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THE IMITATION TECHNIQUE: A TOOL FOR ASCERTAINING AN INDEX OF BILINGUALISM AND BIDIALECTALISM IN PRIMARY-GRADE CHILDREN THROUGH ANALYSES OF RECODING ERRORS*

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Measures of language abilities are often controversial and open to the questions of validity and reliability. Mackey (1969) observes that scales presuppose standard units of measure and units presuppose an understanding of the nature of what is measured. The complexity of the bilingual and bidialectal phenomena is such that there are no discernible units; consequently, one can have only indices which are assumed to reflect certain variables of these phenomena. The variable under consideration in this study is the psycholinguistic process of recoding standard English into a dialect or first language in oral language production.

One tool which can be used for indexing oral language production of bilinguals and bidialectals and for diagnosing language problems is the imitation technique. This technique demonstrates the degree of syntactic deviation from standard English produced by children in a repetition task. By observing oral recoding errors, teachers can note how these errors may, in turn, influence skills in reading and composition (Groff, 1973).

Macnamara (1967) notes that primary-grade bilingual children have varying linguistic experiences and abilities in the language arts skills -- that a person's bilingual capacity is measured along a continuum which may

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differ for each individual. Since primary-grade children's experience in the skills of reading and writing is minimal, measures of aural-oral abilities are more effective and applicable for assessing language dominance than are those based on reading and writing (Zirkel, 1974).

The imitation technique as an aural-oral measure was introduced into psycholinguistic studies by Menyuk in 1963. Through use of this technique, researchers have studied verbal behavior in early child language acquisition as well as the degree of language dominance of bilinguals and bidialectals focusing on oral syntactic skill (Menyuk, 1963; Fraser, Bellugi, and Brown, 1963; Cazden, 1966; Slobin and Welsh, 1973; Osser, Wang and Zaid, 1969; Troike, 1969; Briere, 1969; Natalicio, 1971; Menyuk, 1971; Ervin-Tripp, 1971; DeVita, 1973; Cinque, 1973, Zirkel, 1974; Natalicio and Williams, 1975; Markman, Spilka, and Tucker, 1975; Hresko, 1975).

Chomsky (1968) theorizes that, in English, phonology (surface structure) and semantics (deep structure) are involved in speech production, but the two are linked through syntax. It is in the aspect of syntax that one finds rules for transformational-generative language competence. These rules imply that human beings possess a knowledge of the formal principles of grammar--competence--which determine the grammatical structure of innate language capacity (Lenneberg, 1962). However, this competence must be inferred through observations of language performance which imperfectly reflects underlying capacity (Campbell and Wales, 1970). In keeping with Chomsky's theory; syntactic deviations, as opposed to phonological or semantic deviations, are analyzed and the child's language competence is inferred from his language production in the imitation task.

Current studies of child language acquisition are largely dominated by the hypothesis that the child constructs his language on the basis of a primitive grammar which gradually evolves into a more complex grammar (Menyuk, 1963; 1971; Vetter and Howell, 1971; Brown, 1973; Ferguson and Slobin, 1973). This hypothesis offers the presupposition that the investigator does not impose his own grammatical rules on the utterances of the child, but that the sound system of the child and the rules he employs to form sentences are to be described in their own terms, independently of the model provided by the adult linguistic community. Consequently, elicited imitation as a tool for studying verbal behavior of children is based on the assumption that the child produces his internalized grammar in the repetition task and does not merely mimic the investigator.

The concept of syntactic components which operate in the imitation and recoding of standard English by bilingual and bidialectal children suggested the following study. The linguistic recoding process may have significant consequences that affect the child's performance in reading and composition. Through awareness of children's linguistic recoding, teachers can diagnose difficulties that the recoding process may produce in the language arts skills and can adjust their teaching methods to minimize these difficulties.

Procedures

Subjects

Letters for permission to test children were sent to all of the parents of Spanish and English-speaking children in grades one, two and three of a metropolitan bilingual program. Seventy-five letters were returned giving

permission for children to take part in the study. A sample of 20 multi-ethnic Spanish speakers and 20 Black English speakers was drawn with ages ranging from six through nine distributed equally for both groups as shown?

AGE	BLACK CHILDREN	SPANISH CHILDREN
6	4	4
7	6	6
8	5	5
9	5	5
TOTAL	20	20

Countries represented by the Spanish speakers are presented as follows:

Country	No. of Students
Colombia	3
Cuba	7
Honduras	6
Mexico	1
Nicaragua	1
Puerto Rico	1
Spain	1
TOTAL	20

Materials Used

The Linguistic Structures Repetition Test was developed in 1975 by C. J. Fisher to measure the acquisition of syntactic structures in K, first- and second-grade of English-speaking children (Fagan, et al., 1975). It was chosen for its ease in administering and its control of certain standard-English syntactic features. The ability of the Spanish and Black children to reproduce these features gave an index of errors in recoding of standard English.

The test consists of 36 sentences made up of words from a first-grade word list and is used to examine 15 structures in English. Each sentence is no longer than eight words which, according to Menyuk (1963), should not present a problem in repetition. She states: ". . . within the bounds of a two-to-nine word sentence, the length of the sentence is not critical in determining the success of repetition even for children as young as three years" (p. 436).

Content validity of the test, according to Fisher (1975) rests with the instrument's derivation in psycholinguistic research and its reflection of an expected developmental trend.

The investigator piloted Fisher's test on a Spanish-speaking mother and her two bilingual daughters, ages six and seven (Tilley, 1976), and found that using all of the sentences led to fatigue on the part of the examinees; consequently, she limited the test to 18 sentences which cover the main structures which the test is designed to examine. A test sheet of the 18 sentences was then made for each child for tabulation of error scores.

The Imitation Task

The test took five minutes to administer to each S individually. The instructions were as follows in Spanish to the Spanish speakers and in English to the English speakers: "I am going to say some sentences, and I want you to repeat them after me just as I say them. Don't worry if you can't say them all; just do the very best that you can." A practice sentence was presented to the Ss to ensure that they understood the task. The entire session

of 18 sentences was tape-recorded for each child, and the child's errors were written on his test sheet. Since the test sentences were presented live by the investigator, intonation, stress features and speed of the spoken model structures were not under control. The test sentences are presented in table 1.

Method of Analysis

Because the purpose of the imitation task was to test S's control of specific syntactic structures, it was the correct imitation of these structures which was important. For each of the 18 sentences, certain words were designated as critical for correct imitation. These words made up the critical structures (CS). One structure missed counted as one CS error (CSE). If Ss failed to respond to the test sentence, it was not repeated. When self-corrections occurred, the final version was retained for analysis. All deviations from perfect repetition of the entire structure were tabulated and classified according to the scheme in table 2.

In addition to a critical-structure error score (CSE), each S received a total-error score (TE). The total error score is the number of all deviations from perfect imitation of the entire test sentence. This score is the sum of the frequencies of the errors in each of the 10 categories listed in table 3 and is, therefore, a more comprehensive measure of the child's overall performance on the imitation task. However, if a child made a score of 18 on the CSE, the TE score was not calculated because the child obviously could not speak English. Scores of critical structure errors and total errors for

individual students are presented table 4. These scores can be ranked for an index of bilingualism and bidialectalism.

Results and Discussion

Table 5 lists the means and standard deviations of critical-structure error scores and total-error scores for the two groups in the study. Because the sample was voluntary and, therefore, not considered a randomized one, further statistical analyses were not undertaken.

Results of the study show that repetition of standard English sentences by Black non-standard English-speaking children and by Spanish-speaking bilingual children is not merely mimicry of the surface structure of the utterance but is often a recoding into a first language or dialect. This finding concurs with that of Menyuk (1963), Osser, Wang, and Zaid (1969), and Slobin and Welsh (1973). The rapidity with which recoding is accomplished suggests that the oral language production is similar to that attributed to the coordinate bilingual speaker and might be considered a type of instantaneous translation (Troike, 1969). As a consequence, difficulties can arise in school for these children in the four major language skills: speaking, reading, writing, and listening comprehension.

By noting responses produced in imitation of standard English structures, teachers, as well as teacher trainees, can pay special attention to children's recoding processes and can gain a degree of familiarity with the characteristics of linguistic production of children who do not speak standard English or who have transference problems from a bilingual linguistic environment. When teachers become aware of the process of recoding, they can adjust their methods of teaching to help children overcome difficulties produced by this process.

The imitation technique is a promising diagnostic tool to be used, not only with primary-grade students, but for students of all ages who do not speak standard English and whose process of recoding may interfere with their reading and composition. Further research is needed to refine measurements of oral language production and to incorporate these measurements into teacher-training techniques.

Table 1

LINGUISTIC STRUCTURES REPETITION TEST

Practice Sentence
This is a pretty day.

Test Sentences*
1. That man is captain and he's our neighbor.
2. The hottest day is also the most fun.
3. Get doughnuts and two gallons of chocolate milk.
4. Her mother said she has got to go.
5. Jumping or pushing are both dangerous in school.
6. The coat the man wore was dark blue.
7. The drummer has a drum bigger than himself.
8. Quietly the small boy woke up his brother.
9. Saturday he stays home and he watches t.v.
10. Hopping and jumping, the kangaroo ran from us.
11. The first to get there wins the race.
12. He runs home and yesterday he ran back.
13. We have got to clean up our desks.
14. The teacher asked us to whisper not talk.
15. The puppy the boy chose had brown spots.
16. Santa Claus has some helpers and 8 reindeer.
17. He didn't dare walk on the icy sidewalk.
18. My brother gave his friend a birthday present.

*Underlined segments refer to critical structures.

Table 2

FREQUENCIES OF CRITICAL STRUCTURE ERRORS (CSE)

Sentence	Category	Spanish	Blacks
1	N - V - predicate nominative + clause	3	3
2	comparative, superlative	13	2
3	mass nouns	14	9
4	"has" + got	12	6
5	conjunction	10	11
6	unmarked adjective clause (embeddedness)	16	9
7	have or has as main verb	8	9
8	introductory adverbial	8	1
9	clause after first pattern	14	19
10	introductory participial phrase	9	0
11	nominalization	7	6
12	irregular verb	13	4
13	"have" + got	8	1
14	conjunction	3	2
15	unmarked adjective clause (embeddedness)	15	6
16	irregular noun	15	18
17	modal	10	2
18	unmarked indirect object	11	11

Table 3

FREQUENCIES OF TOTAL ERRORS (TE)*

Category	Blacks	Spanish
1. Omission of inflection:		
Possessive + **	--	--
Third person singular s**	7	12
2. Omission of word:		
Articles	2	14
Noun	6	28
Pronoun	21	24
Verb (Modals)	4	22
Auxiliary:		
Be**	2	0
Do	0	3
Have	6	3
Adverb	6	6
Intensifier	13	29
Relative pronoun +	--	--
Subordinator +	--	--
Conjunction	2	5
Preposition	1	15
3. Change in tense	16	29
4. Change in number	20	6
5. Morphological error (hisself)	22	19
6. Word substitution, same part of speech	54	43
7. Word substitution, different part of speech	7	11
8. Addition of word	24	26
9. Transposition of word order	9	13
10. Failure to repeat sentence	28	82
Total	250	390

* Adapted from Osser, Wang, and Zaid (1969).
**Categories reflecting known dialect variations (Loban, 1966).
+ Not represented in this test.

Table 4

STUDENTS' CSE AND TE SCORES

BLACK CHILDREN			SPANISH CHILDREN		
Student No.	CSE	TE	Student No.	CSE	TE
1	4	12	1	7	18
2	13	39	2	12	31
3	2	7	3	4	12
4	9	10	4*	18	--
5	10	20	5	8	23
6	6	9	6	4	14
7	5	8	7	6	8
8	4	7	8*	18	--
9	4	9	9	12	26
10	9	15	10	9	20
11	5	12	11	9	29
12	5	5	12	11	25
13	4	10	13	13	25
14	2	7	14	10	20
15	3	7	15	8	12
16	6	13	16	11	30
17	6	16	17	4	11
18	10	21	18	6	13
19	4	8	19	7	11
20	8	15	20	11	26

*No English

Table 5

DISTRIBUTIONS OF STUDENTS' CSE AND TE SCORES

	CSE SCORE			TE SCORE		
	N	Mean	SD	N	Mean	SD
Spanish	20	9.4	4.03	18	19.66	7.49
Blacks	20	5.9	2.96	20	12.50	7.64

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